

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. JM-2003 8959 10/785,368 02/25/2004 Aldo Eagle **EXAMINER** 7590 12/23/2005 WERNER, JONATHAN S Alfred E. Miller 406 West Putnam Avenue PAPER NUMBER **ART UNIT** Greenwich, CT 06830 3732

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

\subset	N)
D	r

	Application No.	Applicant(s)	
Office Assis a Commence	10/785,368	EAGLE, ALDO	
Office Action Summary	Examiner	Art Unit	
	Jonathan Werner	3732	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1) Responsive to communication(s) filed on			
a) ☐ This action is FINAL . 2b) ☑ This action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4)⊠ Claim(s) <u>1-14</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) 1-14 is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	election requirement.		
Application Papers			
9) The specification is objected to by the Examiner.			
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa		

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-7, 8-9 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "the" in "the front part." There is insufficient antecedent basis for this limitation in the claim. Claims 5-7 recite the limitations "first part" and "second part." There is insufficient antecedent basis for this limitation in the claim. Claim 8 recites the limitations "first part" and "said chamber." There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-2, 6, 10, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Marlin (US 6,168,432). As to claims 1 and 10, Marlin discloses a two-part needle for injecting heated thermoplastic material into a dental cavity comprising a rear tubular part (16,12) of greater diameter than a front part (74; Figure 7); a chamber in the rear part (78); an open ended

Application/Control Number: 10/785,368 Page 3

Art Unit: 3732

cartridge provided with a nozzle (80); having heated thermoplastic material positioned in said chamber (column 3, lines 19-22); and plunger means in said syringe for forcing said thermoplastic material through the needle (14; and col 3, ln 1-2). As to claim 2, Marlin discloses the length of the front part of the needle can be selected from 20 mm to 30 mm (col 4, ln 9-12) and is bendable (col 3, ln 23-27). As to claim 6, Marlin discloses that each part of the needle is attached to each other by brazing (col 1, ln 29-30). It should be noted however, that applicant is claiming an article of manufacture and not the process of forming/making the device, accordingly, the manner in which the device is formed, i.e. brazing, is not given patentable weight. As to claim 12, Marlin discloses that the thermoplastic material is gutta percha (col 3, ln 6-7). As to claim 13, the needle is fabricated of a metal alloy (col 1, ln 46-47).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 3, 8-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Botich (US 5,407,431). As to claim 3, Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show a circumferential external groove on the rear part, wherein an O-ring is inside said groove. Botich, however, teaches the use of a needle having a rear part with a chamber (21,31), wherein said part has a circumferential external groove (41) with an O-ring (39) in said groove (Figure 2-3).

Application/Control Number: 10/785,368

Art Unit: 3732

Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to include an external groove with an O-ring in said groove in order to provide a sealing engagement for the chamber and its housing as taught by Botich. As to claim 8, Marlin discloses a needle for injecting heated thermoplastic material in a dental cavity comprising a rear tubular part (16,12) provided with a funnel-shaped opening (14) adjacent said syringe (Figure 2); a front part (74; Figure 7) having a smaller diameter than the rear part; an open ended cartridge (80); having heated thermoplastic material positioned in a chamber (column 3, lines 19-22); and plunger means in said syringe for forcing said thermoplastic material through the needle (14; and col 3, ln 1-2). Marlin fails to show the rear tubular part having a circumferential groove defining the end of a chamber remote from a funnel-shaped opening. Botich, however, teaches the use of a needle having a rear part with a chamber (21,31), wherein said part has a circumferential external groove (41) with an O-ring (39) in said groove (Figure 2-3) remote from a funnel-shaped opening (27, Figure 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to include an external groove with an O-ring in said groove in order to provide a sealing engagement for the chamber and its housing as taught by Botich. As to claim 9, Marlin discloses the thermoplastic material is gutta percha (col 3, ln 5-6). As to claim 11, Marlin discloses plunger means that correspond to a configuration of a funnel-shaped opening in the rear tubular part (14).

Page 4

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Botich further in view of Brandhorst (US 5,722,830). Marlin and Botich disclose the two-part needle as previously described while Botich also shows that the groove (41) forms a narrow

Application/Control Number: 10/785,368

Page 5

Art Unit: 3732

opening in the chamber. However, Marlin and Botich fail to show that the nozzle of the cartridge projects through the narrow opening. Brandhorst teaches a dental substance dispenser that has a cartridge (20) wherein the nozzle of said cartridge projects through the narrow opening (28,29) formed from a groove (13,15). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to make the nozzle of the cartridge project through the narrow opening created by a groove in order to ensure that the end of the nozzle will retain its orientation with respect to the engaging cartridge as taught by Brandhorst.

- Osborne (US 2002/0019595). Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show that each part of the needle is attached to each other by soldering. It should be noted that applicant is claiming an article of manufacture and not the process of forming/making the device; accordingly, the manner in which the device is formed, i.e. soldering, is not given patentable weight. Still, for the purpose of examination, Osborne teaches a needle with a first part (20) and a second part (30) wherein each part is attached to each other by soldering (paragraph 33). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to solder each part together in order to ensure a strong, welded connection as taught by Osborne.
- 6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Fischer (US 6,422,865). Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show that each part of the needle is

Application/Control Number: 10/785,368

Page 6

Art Unit: 3732

attached to each other by gluing. It should be noted that applicant is claiming an article of manufacture and not the process of forming/making the device; accordingly, the manner in which the device is formed, i.e. gluing, is not given patentable weight. Still, for the purpose of examination, Fischer teaches a needle with a first part (40) and a second part (60) wherein each part is attached to each other by gluing (col 7, ln 8-12). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to glue each part together in order to ensure a strong, adhesive connection as taught by Fischer.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Berke (US 5,461,445). Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show the needle is fabricated of a thermoconductive plastic. Berke, however, teaches a needle that is fabricated from conductive plastics (col 5, ln 67-68). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to make the needle out of a conductive plastic material in order to reduce the extent of grinding operations as taught by Berke.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to included form PTO-892 for all additional pertinent prior art related to needles for obturating dental cavities.

Art Unit: 3732

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Werner

Examiner AU 3732

JSW 12/19/05

Welsa Burgare MELBA N. BUMGARNER PRIMARY EXAMINER